this treatment, especially the milder forms, in which the attacks are not severe but are frequently repeated. The results are especially good in plethoric patients with a tendency to meteorism, in whom the anginal attacks are incited by an overloaded stomach or by distended intestines. (5) Insufficiency of the kidneys is known to be benefited by a milk diet, especially when the heart shows signs of weakness, or if there are symptoms of impending uremia. (6) Valvular defects as such are no indication for this treatment, but when the heart muscle becomes insufficient and edema develops, much benefit is obtained by the limitation to the Karell diet. (7) Persistent effusions in the serous membranes often yield quickly to a Karell cure. Von Romberg has recommended the advantages of a salt-poor diet in tuberculous peritonitis. His believes that pleural and pericardial effusions disappear more readily than peritoneal effusions with this method of treatment. (8) This method is of great value as a supplement to digitalis therapy when neither alone is effectual He cites instances in which digitalis and other diuretics had no effect until after a period of restriction to the Karell diet. In one patient diuresis commenced on the sixteenth day after the restriction to milk, and in another case the diuresis began on the sixth day and did not reach the maximum until the twelfth day.

The Use of Subcutaneous Injections of Heroin in Cardiac Asthma.—FRAENKEL (*Therap. Monats.*, 1912, xxvi, 14) believes cardiac asthma is primarily due to a passive congestion of the pulmonary circulation. This congestion produces an overdistention of the alveolar capillaries, and consequently a diminution in the size of the alveolar spaces. As a secondary effect of the pulmonary congestion, swelling of the mucous membrane of the finer bronchioles occurs and the lumen of the finer bronchial tubes is often further diminished by spasms of the bronchial musculature. Fraenkel says that morphine acts very favorably upon all these causes of the dyspnea and hence its therapeutic effect in cardiac asthma is usually remarkable. Morphine, however, is open to the objection that it does not act so favorably when its use is long continued. Fraenkel recommends heroin as a substitute for morphine on the ground that heroin has the distinct advantage that it may be given daily for periods of weeks without losing its beneficial effects. The initial dose given by Fraenkel is 0.005 grams, and it may be increased to 0.015 grams. It is often of distinct advantage to combine the heroin with some form of digitalis or other cardiac tonics.

The Action of Iron in Chlorosis.—HEUBNER (*Therap. Monats.*, 1912, xxvi, 44) advances the hypothesis that in chlorosis the ability to reduce the higher salts of iron, the ferric salts, to the lower bivalent forms of iron, the ferrous salts, is lost. The iron in the food is in the form of the higher salts, and chlorotic subjects are not able to assimilate it. He believes that the empiric use of Blaud's pills, of syrup of ferrous iodide, and certain natural mineral waters that contain iron in the bivalent form is justified upon the basis of his hypothesis. The clinical fact that these preparations are particularly useful in the treatment of chlorosis tends to strengthen the theory as advanced by Heubner. On the other hand, the therapeutic effects of iron preparations, such as ferratin, ferrum, oxydatum saccharatum, and hundreds of proprietary preparations have often been disappointing. This, according to Heubner, is due to the fact that these are all the higher salts of iron, and the chlorotic subject is incapable of reducing the iron to a form suitable for absorption.

The Effects of Subdural Injections of Leukocytes on the Development and Course of Experimental Tuberculous Meningitis.—MANWARING (*Jour. Exper. Med.*, 1912, xv, 1) says that cerebrospinal membranes differ from the true serous membranes in that they are almost impervious to blood proteids and normally receive little or no protective substance from this source, and few, if any, leukocytes. Therefore, it becomes necessary to treat pathological processes existing within these membranes by direct inoculation of remedial agents subdurally or into the spinal canal. The author relates his method for producing expermental tuberculous meningitis in dogs and gives a brief summary of the results of subdural inoculations of tubercle bacilli of varying virulence. The leukocytes used in treating the infected animals were obtained by the injection of turpentine into the pleural cavity of dogs, as perfected by Opie in his study of the treatment of experimental tuberculous pleurisy. Manwaring found in his experiments that subdural inoculations of tubercle bacilli of established virulence for guinea-pigs and rabbits produces in the dog a tuberculous meningitis followed by paralysis and death. When suspensions of canine leukocytes are injected subdurally, following such inoculations there occurs uniformly a delay in the development of the paralysis and a prolongation of the life of the treated animal. In dogs inoculated with small doses of tubercle bacilli of low virulence, the development of paralysis has been prevented by this means for periods of seven months (up to the present date), while the untreated animals injected with the same cultures have all developed paralytic symptoms within a period of about four weeks.

Chemotherapeutic Experiments on Animals Suffering from Malignant Tumors.—A. WASSERMANN, HANSEMANN, KEYSER, and M. WASSERMANN (*Berl. klin. Woch.*, 1912, xlix, 4) relate their experiments in an endeavor to find a chemical substance capable of exerting a specific destructive action upon the cells of malignant tumors occurring in mice either spontaneously or as a result of inoculation. They found in experiments in vitro that selenium and tellurium salts were taken up selectively by carcinoma cells. They also found that when salts of selenium and tellurium were injected locally into the tumors of mice affected with carcinoma these tumors softened and liquefied. However, it is not possible to inject all malignant tumors locally, and any attempt to cure a malignant tumor must take in consideration the possibility of reaching all the tumor cells that possibly may be distributed by metastases widely throughout the body. They next attempted to find some chemical preparation derived from these metals that could be injected into the blood, and that would distribute itself rapidly throughout the body and at the same time be diffusible. More than 200 chemical combinations were tried before Wassermann and his co-workers obtained a preparation consisting of a compound of eosin and selenium. This chemical combination is unstable, and the exact